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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,497	04/23/2001	Samuel T. Barone JR.	42244/JEC/M770	4459

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EXAMINER

YIMAM, HARUN M

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/840,497	Applicant(s) BARONE ET AL.	
	Examiner Harun M. Yimam	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>see Office Action</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 07/16/2001, 01/04/2002, and 02/07/2002 have been considered by the examiner.

Specification

2. The specification is objected to because of the following informalities: "in such as way" on page 3, line 17 should be changed to "in such a way".

Appropriate correction is required.

Claim Objections

3. Claim 9 is objected to because of the following informalities: "closed to" in line 2 should be changed to "close to".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-11, 17-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Bertram (US 2002/0064177).

Considering claim 1, Bertram discloses an interactive television system (paragraph 0058, lines 4-13) comprising: a first input for receiving a first data stream; a second input for receiving a second data stream (T_{IN1} and T_{IN2} in figure 6--paragraph 0044, lines 1-5); the first data stream having a higher priority than the second data stream (the priority is predefined: merging two data streams by inserting a portion of data from the second data stream into a first data stream); and a processing unit (610 in figure 6—paragraph 0044, lines 5-8, which can be used interchangeably with the processing unit—470 of figure 4—paragraph 0043, lines 5-10) coupled to the first input and the second input, characterized in that the processing unit (470 of figure 4) creates a gap in the first data stream (T_{IN1}) for inserting at least a portion of data carried by the second data stream (R) (470 in figure 4 creates a gap by detecting a null packet to insert a portion of data carried by the second data stream—R into the first data stream— T_{IN1} : the needed gap is a null packet for merging the two data streams—paragraph 0038, lines 1-16), the gap being selected in a location in the first data stream so as to allow the data carried by the second stream to be displayed as close to a desired time as possible without disrupting display of data carried by the first data stream (paragraph 0009, lines 12-17 and paragraph 0038, lines 13-16).

As for claim 2, Bertram discloses that the data carried by the first data stream is closed caption data (the transport stream, which is the first data stream— T_{IN1} in figure 6, includes packets associated with a television program including closed caption data—paragraph 0009, lines 12-14 and paragraph 0028, lines 6-9).

With regards to claim 3, Bertram discloses that the data carried by the second data stream is interactive television data including interactive content (the program stream, which is the second data stream— T_{IN2} in figure 6, can be interactively controlled by a user and therefore includes interactive content—paragraph 0058, lines 4-13).

Regarding claim 4, Bertram discloses that the portion of data carried by the second data stream includes a reveal command (the program stream can be interactively controlled by a user using commands and therefore inherently includes reveal commands—paragraph 0058, lines 9-13).

Considering claim 5, Bertram discloses an interactive television system (paragraph 0058, lines 4-13) comprising: a first input for receiving a first data stream; a second input for receiving a second data stream (T_{IN1} and T_{IN2} in figure 6—paragraph 0045, lines 1-7); and a processing unit (610 in figure 6—paragraph 0044, lines 5-8) coupled to the first input and the second input, the processing unit including logic for: creating a gap in the first data stream (T_{IN1}) for inserting at least a portion of data

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carried by the second data stream (R) (470 in figure 4 creates a gap by detecting a null packet to insert a portion of data carried by the second data stream—R into the first data stream— T_{IN1} : the needed gap is a null packet for merging the two data streams—paragraph 0038, lines 1-16); inserting a first portion of the plurality of second data units into the created gap (paragraph 0038, lines 1-16); detecting another gap in the first data stream; and electronically inserting a second portion of the plurality of second data units into the detected gap (paragraph 0012, lines 13-16).

As for claim 6, Bertram discloses that the plurality of the first data units are closed caption data (the transport stream, which is the first data stream— T_{IN1} in figure 6, includes packets associated with a television program including closed caption data—paragraph 0009, lines 12-14 and paragraph 0028, lines 6-9).

With regards to claim 7, Bertram discloses that the plurality of the second data units are interactive television data including interactive content (the program stream, which is the second data stream— T_{IN2} in figure 6, can be interactively controlled by a user and therefore includes interactive content—paragraph 0058, lines 4-13).

Regarding claim 8, Bertram discloses that the created and detected gaps are time slots in a television signal containing no data units (Bertram discloses that the controllers (processing units) of figure 4 and figure 6 may be interchanged. Therefore,

the created and detected gaps are NULL packets assigned to certain time slots containing no data—paragraph 0034, lines 6-11).

Considering claim 9, Bertram discloses that the created gap is as close to a desired reveal time as possible (paragraph 0038, lines 13-15).

As for claim 10, Bertram discloses that the portion of data carried by the second data stream includes a reveal command (the program stream can be interactively controlled by a user using commands and therefore inherently includes reveal commands—paragraph 0058, lines 9-13).

With regards to claim 11, Bertram discloses that the two first data units are payload data (payload data in an MPEG packet is inherent because it is the nature of a packet to have a header and a payload).

Regarding claim 17, Bertram discloses an interactive television system (paragraph 0058, lines 4-13), a method for merging a first data stream having a plurality of first data units with a second data stream having a plurality of second data units (T_{IN1} and T_{IN2} in figure 6--paragraph 0045, lines 1-7 and paragraph 0048, lines 7-14) for transmitting in a television signal, the first data stream having a higher priority than the second data stream (the priority is predefined: merging two data streams by inserting a portion of data from the second data stream into a first data stream), the

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method comprising the steps of: creating a gap in the first data stream (T_{IN1}) for inserting at least a portion of data carried by the second data stream (R) (470 in figure 4 creates a gap by detecting a null packet to insert a portion of data carried by the second data stream—R into the first data stream— T_{IN1} : the needed gap is a null packet for merging the two data streams—paragraph 0038, lines 1-16); inserting a first portion of the plurality of second data units into the created gap (paragraph 0038, lines 1-16); detecting another gap in the first data stream; and electronically inserting a second portion of the plurality of second data units into the detected gap (paragraph 0012, lines 13-16).

Considering claim 18, Bertram discloses that the plurality of the first data units are closed caption data (the transport stream, which is the first data stream— T_{IN1} in figure 6, includes packets associated with a television program including closed caption data—paragraph 0009, lines 12-14 and paragraph 0028, lines 6-9).

As for claim 19, Bertram discloses that the plurality of the second data units are interactive television data including interactive content (the program stream, which is the second data stream— T_{IN2} in figure 6, can be interactively controlled by a user and therefore includes interactive content—paragraph 0058, lines 4-13).

With regards to claim 20, Bertram discloses that the created and detected gaps are time slots in a television signal containing no data units (Bertram discloses that the

controllers (processing units) of figure 4 and figure 6 may be interchanged. Therefore, the created and detected gaps are NULL packets assigned to certain time slots containing no data—paragraph 0034, lines 6-11).

Regarding claim 21, Bertram discloses that the created gap is as close to a desired reveal time as possible (paragraph 0038, lines 13-15).

Considering claim 22, Bertram discloses that the portion of data carried by the second data stream includes a reveal command (the program stream can be interactively controlled by a user using commands and therefore inherently includes reveal commands—paragraph 0058, lines 9-13).

As for claim 23, Bertram discloses that the two first data units are payload data (payload data in an MPEG packet is inherent because it is the nature of a packet to have a header and a payload).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 12-16, and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertram (US 2002/0064177) and Bauchot (US 6,141,336).

Considering claim 12, Bertram discloses an interactive television system (paragraph 0058, lines 4-13) comprising: a first input for receiving a first data stream; a second input for receiving a second data stream (T_{IN1} and T_{IN2} in figure 6--paragraph 0045, lines 1-7); and a processing unit (610 in figure 6—paragraph 0044, lines 5-8) coupled to the first input and the second input.

Bertram fails to disclose that the processing unit includes logic for: identifying time slots assigned to the plurality of first data units in the first data stream; reassigning a portion of the plurality of first data units assigned to particular time slots to earlier time slots; and assigning at least a portion of the plurality of second data units in the second data stream to the particular time slots.

In analogous art, Bauchot discloses a processing unit (master scheduler—29 in figure 1) including logic for: identifying time slots assigned to the plurality of first data units in the first data stream (column 5, lines 32-37); reassigning a portion of the plurality of first data units assigned to particular time slots to earlier time slots; and assigning at least a portion of the plurality of second data units in the second data stream to the particular time slots (see figure 5—time slots are identified and a portion of the plurality of the first data units, “X X”, are shifted left: reassigned to earlier time

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slots, and a new cell, “ * ”, and an “overhead”: a portion of the plurality of the second data units, are assigned to the particular time slots).

It would have been obvious to one of ordinary skill in the art to modify Bertram's system to include a reassignment of a portion of data, as taught by Bauchot, for the benefit of allocating cells of data to particular time slots according to their transmission priority (column 7, lines 18-32).

Claims 13 and 25 are met by Bertram and Bauchot. In particular, Bertram discloses that the plurality of the first data units are closed caption data (the transport stream, which is the first data stream— T_{IN1} in figure 6, includes packets associated with a television program including closed caption data—paragraph 0009, lines 12-14 and paragraph 0028, lines 6-9).

Claims 14 and 26 are met by Bertram and Bauchot. In particular, Bertram discloses that the plurality of the second data units are interactive television data including interactive content (the program stream, which is the second data stream— T_{IN2} in figure 6, can be interactively controlled by a user and therefore includes interactive content—paragraph 0058, lines 4-13).

Claims 15 and 27 are met by Bertram and Bauchot. In particular, Bertram discloses that the portion of data carried by the second data stream includes a reveal

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command (the program stream can be interactively controlled by a user using commands and therefore inherently includes reveal commands—paragraph 0058, lines 9-13).

Claims 16 and 28 are met by Bertram and Bauchot. In particular, Bertram discloses that the two first data units are payload data (payload data in an MPEG packet is inherent because it is the nature of a packet to have a header and a payload).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harun M. Yimam whose telephone number is 571-272-7260. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-272-6000.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HMY


HAITRAN
PRIMARY EXAMINER